

THE MARYLAND STATE HORTICULTURAL DEPARTMENT

Maryland Agricultural College, College Park, Md.

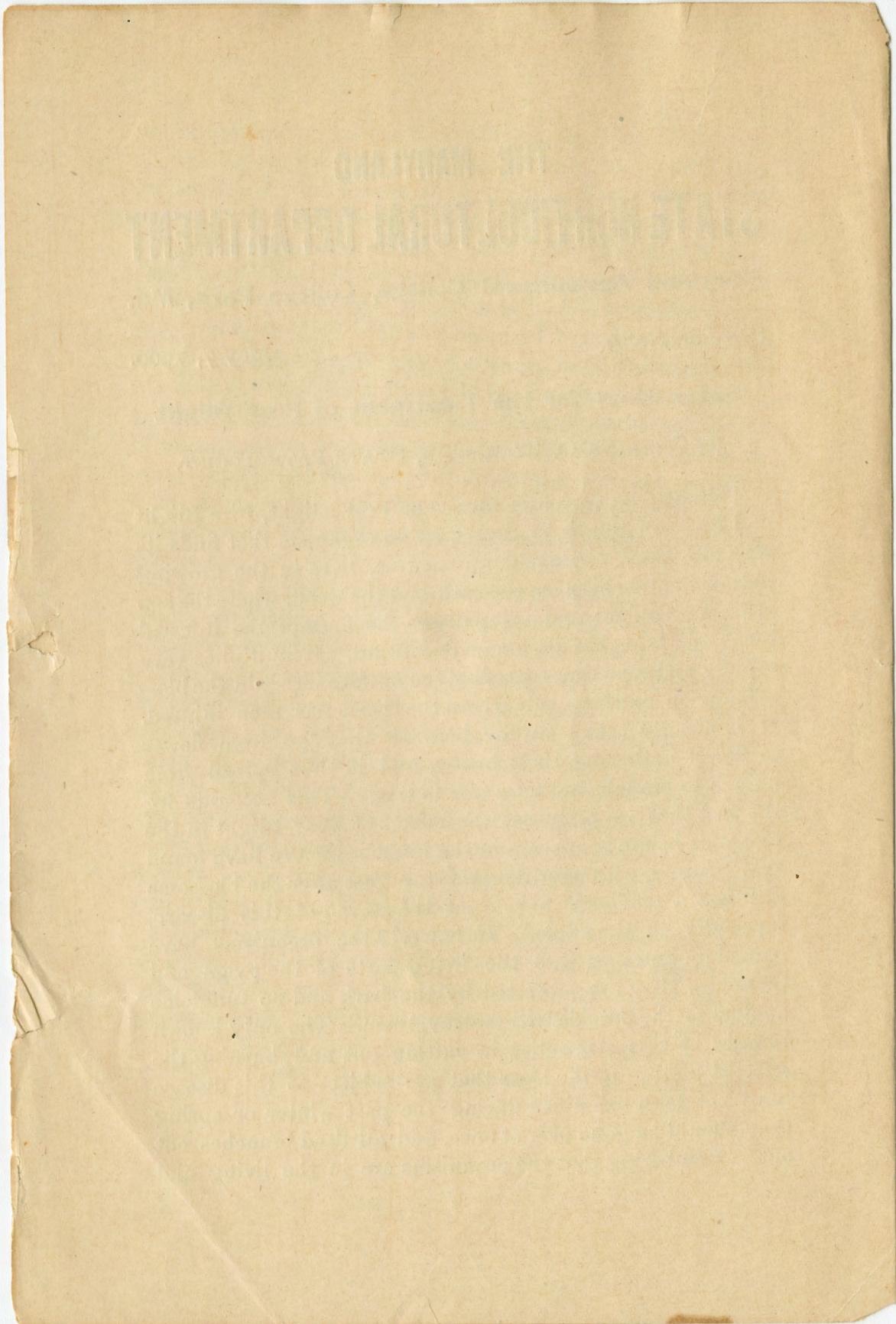
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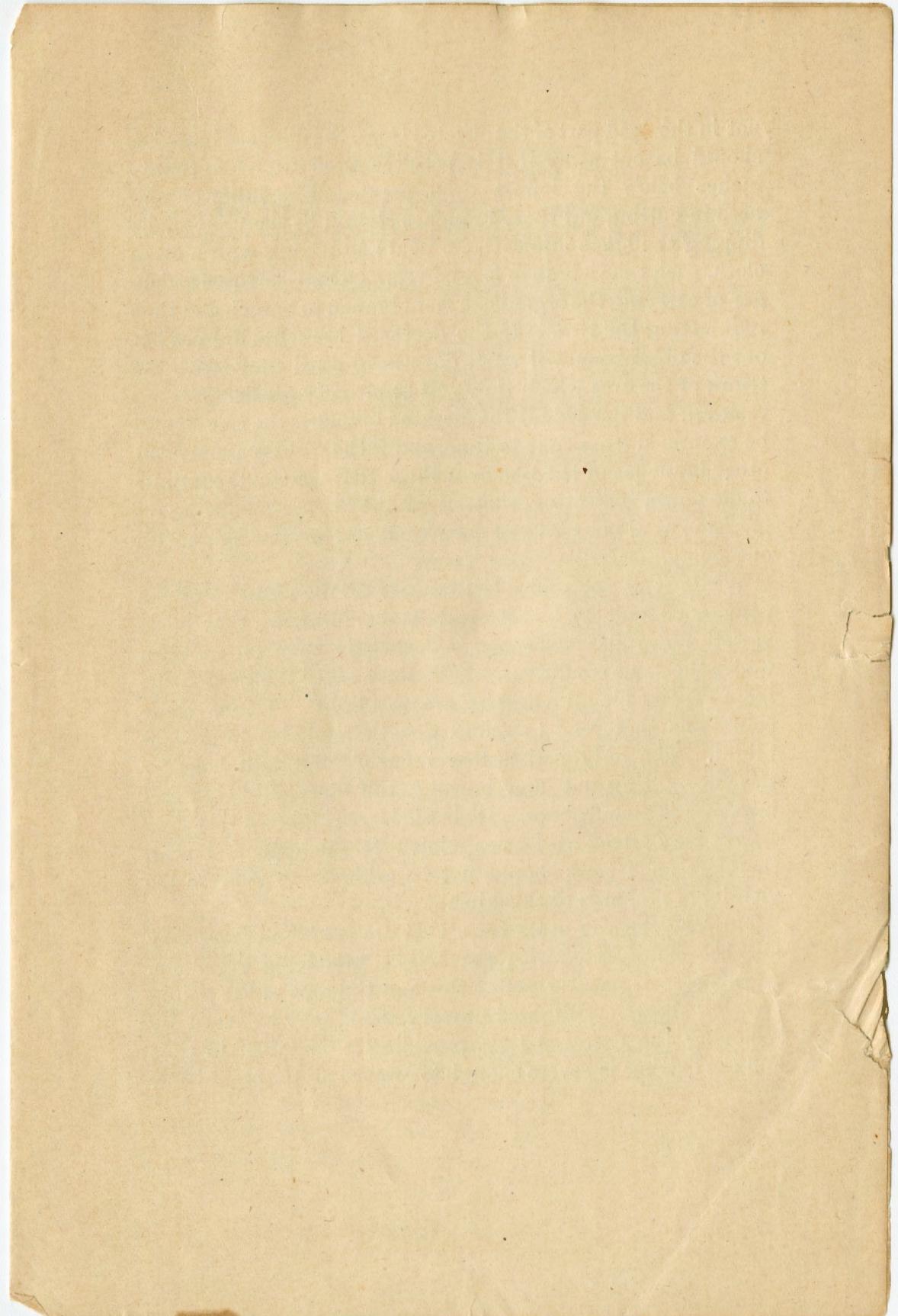
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Suggestions for the Treatment of Pear Blight

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This disease, variously known as Pear Blight, Fire Blight and Blossom Blight, is caused by an organism that finds its way into pear, apple and quince tree, lives in the growing part of the tree between the bark and the wood, where the sap is most abundant, and as rapidly as the ends of the infested twigs and branches die moves downward. It multiplies very rapidly and sometimes comes to the surface either in the blossoms or in exuding sap where the bark has been injured. It is usually taken up by bees as they go from flower to flower gathering their honey, and is thus spread from branch to branch, and from tree to tree. This accounts for the fact that we often see the effects of Pear Blight in the blossoms before it appears in the branches. We have found that spraying with Bordeaux mixture just after the blossoms fall has a tendency to prevent the spread of this disease, especially in the apple. If however the organisms have gained an entrance into the living parts of the twigs and branches, they are protected by the bark and no fungicide applied to the outside will destroy them. The only known remedy at this stage lies in cutting out and burning the affected parts. If the trees that are subject to this disease have not been examined during the past winter or spring they should be gone over at once, and all dead branches cut out. Remembering that the organisms are in the living and





not in the dead part of the affected trees, the diseased branches should be cut away if it is possible from twelve to twenty inches below the lowest dead point. The knife or saw used in cutting out these branches should be disinfected, by dipping the blade into carbolic acid and wiping with a clean cloth, each time a branch is removed. Otherwise there is danger of carrying the organisms from branch to branch and thus re-infecting the tree. If the deceased branches are not cut out the organisms will work downward until they reach the trunk of the tree which they will eventually girdle. Having removed and burned all the diseased branches the tree should be examined from time to time, and if the disease appears on other branches of the tree or if those that were cut, continue to die down, indicating that all of the disease-producing organisms were not removed cutting should be done again without delay.

While it is not probable that any of the varieties of the pomaceous fruit are blight proof it is well-known that some varieties are attacked much more readily than others even under the same conditions. The more rapid the growth the more susceptible all varieties are to blight. Hence those conditions that tend to retard growth tend also to prevent blight. The only satisfactory remedy for blight however lies in cutting out and burning the diseased twigs and branches as stated above. It should be remembered that Pear Blight may attack wild trees related to the apple and pear, therefore such trees should not be allowed to grow in the vicinity of orchards of this kind.

Nursery stock or other trees that are not blossoming may also become infected with the blight producing organism. In this case it usually enters through the tops of the young growing shoots. Blighted nursery stock, may be saved by removing the deceased tips; providing it is taken in time and the cutting is severe enough to remove all the organisms.